Slope

Slope Formula

$$\text{slope} = \frac{\text{change in y}}{\text{change in x}} = \frac{y_2 - y_1}{x_2 - x_1}$$
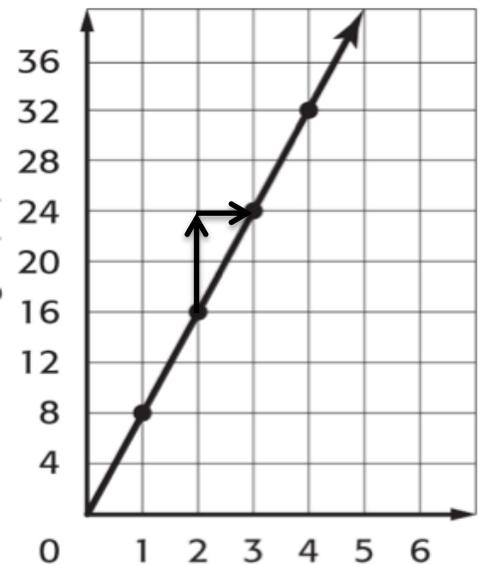
← vertical change

← horizontal change

You can also say that

$$\text{Slope} = \frac{\text{rise}}{\text{run}}$$

o   Count the number of units that make up the <u>RISE</u> of the line.

Write this number for the <u>NUMERATOR</u> of the fraction below.

o   Count the number of units that make up the <u>RUN</u> of the line.

Write this number for the <u>DENOMINATOR</u> of the fraction
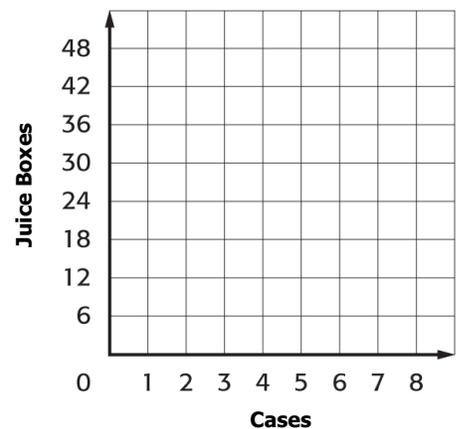
below.

$$\frac{\text{rise}}{\text{run}} = \underline{\hspace{1cm}} \qquad \text{So, the slope of the line is } \underline{\hspace{1cm}}$$

DIRECTIONS: Graph the data. Then find the slope of the line. Explain what the slope represents.

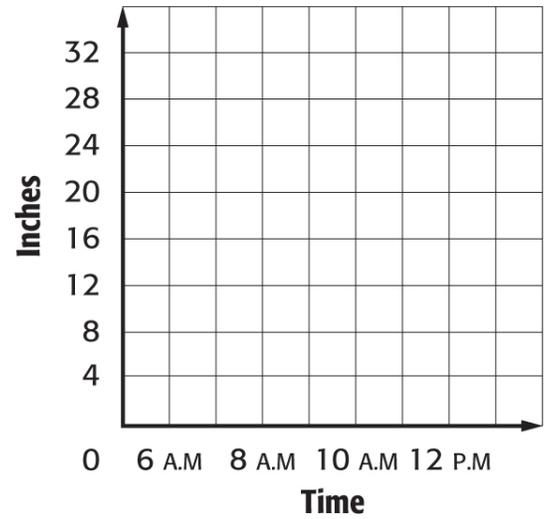- The table shows the number of juice boxes per case.

Cases	1	2	3	4
Juice Boxes	12	24	36	48

Juice Boxes

48
42
36
30
24
18
12
6

0   1 2 3 4 5 6 7 8

Cases

DIRECTIONS: Graph the data. Then find the slope of the line. Explain what the slope represents.

1. At 6 A.M., the retention pond had 28 inches of water in it. The water receded so that at 10 A.M. there were 16 inches of water left.

Inches

32
28
24
20
16
12
8
4
0

6 A.M   8 A.M   10 A.M   12 P.M

Time

2.

Hours	1	2	3	4
Wages ($)	11	22	33	44

Wages ($)

44

33

22

11

0   1   2   3   4

Hours